

# MONTANA AERONAUTICS COMMISSION



Volume 16 No. 8

August, 1965

## WALTER HOPE ELECTED TO COMMISSION CHAIRMAN



Walter Hope of Hysham, representative of the County Commissioner's Association on the Montana Aeronautics Commission was elected Chairman for the coming year at the regular July meeting. Mr. Hope has served on the Commission since his appointment by the late Governor Nutter in June of 1961.

Walter has been an active member

on the Commission and one of the original supporters of the MAC's General Aviation Utility Airport Program.

Mr. Hope was born, raised and attended schools in the Big Horn area. Mr. and Mrs. Hope and their four children reside south of Hysham where Walter is engaged in running their extensive ranch operation.

Walter has served as County Commissioner for Treasure County for the past 15 years, serving nearly half of those years as Chairman.

### BELL—VICE CHAIRMAN

Carl W. "Bill" Bell was elected Vice-Chairman and represents the Montana Pilot's Association on the Commission and received his appointment in 1961.

Mr. Bell has always taken an active part in his local MPA hangar and in the state organization and supported their activities.

Bill is an avid aviation booster, holds a Commercial license with Instrument rating, and pilots his own twin-engined Cessna 310 extensively in connection with his various business activities. He is the present State President of the Montana Chamber of Commerce.

Bill, his wife Dorothy, and their six children reside in Glasgow where he owns and operates the Bell Mortuary.

### HUGHES—SECRETARY

Jack R. Hughes, representing the Flight Operators on the Commission was elected Commission Secretary. Jack, Chief Pilot for Johnson Flying Service, Missoula, was appointed to the Commission by Governor Babcock for a term of four years in July 1963.

Jack in addition to holding the rating of commercial pilot, single and multi-engine land holds rating in DC-2, DC-3, Ford 5, Gruman TBM, Instrument, Helicopter and Flight Instructor, airplane and rotor craft. He is a designated FAA Flight Examiner in airplane, rotorcraft and parachute rigging.

A past President of the Montana Aviation Trades Association in 1963-64, Jack has been an active participant in Montana aviation affairs for a number of years.

Jack and his wife Evelyn, have 5 children and reside at 340 West Central Avenue, Missoula.

The remaining members of the Commission are: Mr. Clarence R. Anthony, Helena, representing Education on the Commission; Mr. E. B. "Ted" Cogswell of Great Falls, representing the Montana Chamber of Commerce; Mr. Herb Jungemann, Billings, representing the Air Carriers and Mr. Gordon Hickman, Harlowton, representing the Municipal League.

Official Monthly Publication  
of the  
**MONTANA AERONAUTICS  
COMMISSION**  
Box 1698  
Helena, Montana  
Tim Babcock, Governor  
Charles A. Lynch, Director

Walter Hope, Chairman  
Carl W. (Bill) Bell, Vice Chairman  
Jack R. Hughes Secretary  
Herb Jungemann, Member  
E. B. Cogswell, Member  
Clarence Anthony, Member  
Gordon Hickman, Member

3

**INMEMORIAM**  
**JOHN W. FOX, JR.**  
1907 - 1965  
Fox Flying Service  
Butte, Montana

We extend our sympathy to the family and friends of John W. Fox, long time operator and aviation supporter. John held the respect of Montana pilots throughout his many years in the industry.

**DIRECTORS COLUMN**



Charles A. Lynch

**ARE YOU INTERESTED?**

It is the policy of the Federal Aviation Agency to decommission all L/MF facilities as rapidly as practicable. Exceptions to this policy will be made only when it is well established that they are required for IFR navigational aids and/or for transcribed weather broadcast service in accordance with the area weather coverage plan.

(1) The following L/MF ranges and radio beacons are not used in the airway system.

(2) There are no prescribed ap-

proach procedures predicated on the Whitehall L/MF radio range.

In consideration of the foregoing, the Federal Aviation Agency proposes to decommission the Whitehall, Montana L/MF radio range station on August 16, 1965.

The Helena, Montana L/MF radio range station on August 16, 1965.

The Lewistown, Montana L/MF radio beacon will be decommissioned on October 14, 1965.

The Dillon, Montana L/MF radio beacon on November 11, 1965.

The Cut Bank, Montana L/MF radio beacon on November 11, 1965.

The Livingston, Montana L/MF radio beacon on November 11, 1965.

*Letters to the Director*

Mr. Charles A. Lynch  
Director  
Montana Aeronautics Commission  
Helena, Montana

Dear Sir:

The City Council of the Town of Three Forks would like to extend our sincere thanks for the contributions of the Montana Aeronautics Commission in planning and engineering the new lighting system for our city airport.

The diligent, cooperative, and industrious manner in which Mr. Vern Moody and Mr. Worthie Rauscher tackled the problems of engineering, planning, and surveying the project will long be remembered and shall be duly recorded in the archives of the city.

This fine new lighting system now puts flying on twenty four hour basis in the Three Forks area and undoubtedly will contribute to the promotion of flying and safety in this area in the years to come.

In closing allow me to congratulate you on your fine staff of dedicated personnel who are doing so very much to promote flying in general in Montana.

Sincerely,  
William A. Fairhurst  
Chairman,  
Airport Committee  
Three Forks City Council

**FOR SALE:** Fixed Base Operation—Hangar with office space—two pumps—located at Townsend, Montana. Interested persons contact: Sybil Acton, 322 North 20th Avenue, Bozeman, Montana.

**FAA COMMISSIONS THE  
FIRST TWO OF ELEVEN  
TRAILER-MOUNTED  
TVOR FACILITIES**

The first two of a series of cost-saving trailer-mounted TVOR landing aids have been put into operation by the Federal Aviation Agency at Shelbyville, Tenn., and at Saranac Lake, N.Y.

TVOR is an acronym for Terminal Very High Frequency Omnidirectional Radio Range. TVOR's are electronic air navigation facilities which give directional information to pilots of appropriately equipped aircraft. These facilities are placed for best approach guidance to an airport, but, where possible, are positioned also to provide en route guidance to pilots flying as far as 40 or 50 miles away.

Other locations currently scheduled for the TVOR trailer-mounted facilities are: Muncie, Ind.; Cape Girardeau, Mo.; Galesburg, Ill.; Manhattan, Kans.; Manitowoc, Wisc.; Marion, Ill.; Mattoon, Ill.; Kalispell, Mont.; and Jackson, Wyo. All are expected to be in operation by late fall 1965.

Each TVOR trailer, costing approximately \$5,000, will save the government an estimated \$7,000 over the cost of conventional fixed housing, and also will provide the advantage of mobility so that changing air traffic conditions can be accommodated. Additional savings in travel time and per diem costs will be realized by installing electronic equipment in the trailer at central rather than individual field locations.

Each trailer-mounted TVOR will be towed to a selected site, the wheels removed and attached to a prepared concrete base. The wheels will be returned to a central FAA regional location for further use.

As of January 1, 1966, the FAA was operating a total of 85 TVOR facilities, all with built-in-place housing.

**STATISTICS**

61/37
37/17
35/15

	Accidents Total	Fatalities
1964 Total .....	61	37
'64 as of this date ..	37	17
'65 as of this date ..	35	15

## FRANK WILEY RETIRES

A no host banquet was held by individual members of the Aeronautics Commission at the Placer Hotel in Helena on July 13 to honor Frank W. Wiley, former director of the Commission. Close to 200 of Frank's friends and admirers including General Aviation Operators, pilots, wives, former and present Commission members and staff from throughout Montana were on hand to pay tribute to Frank. Mr. and Mrs. Roy Schreck came from Palm Springs, California to attend the banquet.

Mr. Henry Loble, MAC's legal advisor, acted as Master of Ceremonies and made the presentation of a personalized plaque by Irvin "Shorty" Shope, well known Montana artist.

A beautiful set of luggage was the gift to Frank and Bernice Wiley from four Montana Aviation groups—The Montana Pilot's Association, the Aviation Trades Association, The Flying Farmers and Ladies 99's.

Director Lynch read a few of the many telegrams received by Frank from friends and former associates throughout Montana and from other states who were unable to attend the banquet.

Frank's retirement came after 19 years with the Montana Aeronautics Commission and 42 years in aviation. His aviation career was an eventful one—one filled with contributions not only to Montana Aviation but aviation in general.

Frank was employed in 1921 at the Miles City Aero Club, Miles City, Montana, as an aviation mechanic. He began flying in 1923, was issued his Federation Aeronautique Internationale pilots license No. 6741 in 1927 and his CAA (FAA) Commercial Pilots Certificate (3007) on February 15, 1928.

In addition to having his own flight operation in Miles City, between the years 1923 to 1942, Frank was employed by Ryan Airlines and Douglas Aircraft Companies of California; Westland Oil Company, Minot, North Dakota; The American Aircraft Corporation; The United States Army Engineers; Hammer Airlines and Wallace Aerial Surveys of Spokane, Washington; Johnson Flying Service of Missoula—he barnstormed throughout California and did exhibition flying throughout the Northwest.

By 1942 Frank held a Commercial License with Flight and Ground Instructors Ratings—was a designated Flight Examiner and held an airplane and engine Mechanic's license. He was rated with the Civilian Pilot Training Service as Primary, Secondary and Cross Country Instructor.



Frank W. Wiley

Frank joined the United States Army Air Force as a Captain on January 19, 1943, and was separated from the Army in 1945 to become the first Director of the Montana Aeronautics Commission.

The Commission was created in the 1945 Legislative Session and their first offices were "a desk" in the Montana Chamber of Commerce Office. After the first year, Frank and his secretary arranged to build an office in the Electric Block on Helena's sixth avenue. In 1958 Frank and his staff of three, moved into the present building located on the Helena Airport.

Frank's efforts and accomplishments during his years as Director are too many to list, however, among the projects that were inaugurated during those years were:

The Standards for the GI Training Program (MAC's first big program).

The Airport Master Plan—The Enforcement Program (registration of Agricultural Aircraft and Pilot Registration)—Crop Spraying Schools—The Aviation Education Program—Aeronautical Charts and Airport Directories—"The Montana and The Sky" Newsletter and the planning of the West Yellowstone Airport.

Frank retired as Director and became the Commission Advisor in 1961 and at that time he began the Aviation History Project. The history covers aviation, aeronautical events and personalities from 1865 through 1930. The history is completed and will go to press in the very near future.

Though officially retiring—we know that Frank Wiley will continue to "Look to the Skies" and retain his avid interest in the industry to which he has given such a great portion of his lifetime. He retires with a record of which he can be very proud. The Commission congratulates Frank on this record and wishes the Wileys many active and happy years of retirement.

## "MINOT AIR FORCE BASE HOLDS CIVILIAN FLY-IN"

Minot Air Force Base, Minot, North Dakota will sponsor a breakfast "Fly-In" for civilian pilots and owners on Sunday, August 15, from 8 A.M. to 4:30 P.M. All civilian pilots and guests in our general area are cordially invited to attend.

In order to attend this "Fly-In", each pilot must fill out in advance and mail to the Base Director of Operations, Minot Air Force Base, North Dakota, a copy of AF Form 180, a hold-harmless agreement which releases the Air Force from any liability for accidents during the "Fly-In". All aircraft must have two-way radio capability.

In conjunction with the "Fly-In", the base will have on the flight line a display of Strategic Air Command tactical and non-tactical aircraft. Conducted tours will be given and a military fly-over is planned. Several civilian aircraft distributors will also have a static display of new aircraft.

In order to complete our plans for the "Fly-In", we would appreciate having each pilot complete the AF Form 180 and mail prior to Fly-In with the total number, and if possible, the names of the ladies and gentlemen who will attend in his aircraft.

Form 180 may be obtained by Montana pilots wishing to attend from the Montana Aeronautics Commission, P.O. Box 1698, Helena, Montana.

# ANNUAL AVIATION MECHANIC SAFETY AWARDS 1965 PROGRAM

Lee C. Mills  
FAA General Aviation Inspector  
Helena

**Pilots, fixed base operators, aircraft owners.**

We in the FAA are making a special appeal to you to participate in this year's annual aviation mechanic safety award contest, which ends December 31st.

The objective of the contest is to give recognition to the aviation mechanic for their role in aviation safety by selecting a mechanic from this state who has made an outstanding contribution to aviation safety.

If the mechanic working for you, or maintaining your aircraft, has made any improvement to, or suggestion of an improvement, or a design change to an aircraft which has resulted in increased reliability or has developed an inspection procedure that has contributed to safety, he is eligible for the state award.

We have many fine mechanics who are doing a good job, but in the past we have found they have a reluctance to pat themselves on the back, therefore we are making a special appeal this year to the pilots for recommendations.

Entry blanks are being mailed out to all operators or may be obtained at your local FAA District Office.

## NUMBER OF AWARDS

**State Awards.** Fifty awards are made on a state level, one in each state for the general aviation winner. If a winner is located in Puerto Rico or the Virgin Islands, additional awards are made. State general aviation mechanic winners become competitively eligible for FAA regional general aviation awards. Air carrier mechanic awards are made on a regional basis only, due to the geographic locations of air carrier headquarters.

**Regional Awards.** Fifteen regional awards are made consisting of one air carrier and one general aviation award in each of the following seven FAA regions: (1) Eastern, (2) Southern, (3) Southwest, (4) Central, (5) Western, (6) Pacific, and (7) Alaskan. The 15th award will be given in the air carrier category in the Europe, Africa, and Middle East Region. The

regional winners are competitively eligible for the national awards.

**National Awards.** Two national awards are made—one air carrier and one general aviation. The national award winners are selected from the regional winners.

## AWARD GUIDELINES

Two guidelines for the selection of winners have been established:

"For the suggestion of a design or 'improvement' to an aircraft or powerplant or any of its components that led to, or resulted in increased reliability and/or safety in aviation."

"For the suggestion or development of a maintenance and/or inspection procedure that contributed significantly to safety in aviation."

## ELIGIBILITY FOR CONSIDERATION

Eligible mechanics may submit their own entry forms. In addition, supervisors or other knowledgeable personnel may submit an entry form for an eligible aviation mechanic. Entries should be made on FAA Form 3338, Entry Form—Aviation Mechanic Safety Award, and submitted to the FAA district office having jurisdiction over the geographic area in which the mechanic is employed.

Winners are selected without regard for race, creed, color, sex, or national origin.

Aviation mechanics employed outside the continental limits of the United States who are foreign nationals employed by a U.S. company and who hold a valid FAA mechanic certificate are eligible.

Aviation mechanics actively engaged or employed by aircraft, powerplant, or accessory manufacturers as mechanics performing "flight line" aviation mechanic duties are eligible. Repairmen, authorized inspectors (AIs), designated mechanic examiners, and parachute riggers are eligible.

Employees of the Federal Aviation Agency and the Flight Safety Foundation are not eligible.

Contributions developed during the calendar years of 1964 and 1965 are eligible for the 1965 awards. The closing date for the 1965 awards will be December 31, 1965.

Patented safety contributions are eligible.

Qualified suggestions or developments, which previously have received awards from employers, are eligible.

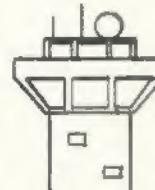
A contribution developed by the cooperative efforts of more than one person is judged accordingly. In

this case, duplicate awards are granted.

An entrant must be working as an active aviation mechanic. For the purpose of this program, the aviation mechanic is defined as an individual who is skilled in the methods, techniques, and practices necessary for the performance of maintenance, inspection, or alteration of aircraft as a whole or any of the major aircraft subdivisions such as engines, propellers, airframes, and appliances. He uses such skills either as the artisan who works with his hands or directly supervises others who work with their hands. This eliminates the professional engineer or the "mechanic" specifically employed, for example, as a fuel service employee or in similar associated positions, which in certain job descriptions could be titled a "mechanic." The eligible aviation mechanic, for this purpose, is not required to hold a valid FAA mechanic certificate in order to participate.

## SCREENING AND SELECTION OF ENTRIES

Screening and selection of entries for state and regional awards are made by committees composed of aviation mechanics, FAA personnel, and civil and military aviation personnel possessing the technical qualifications required to evaluate and judge the entrant's contribution. Committee members are selected from within the geographic boundaries of the particular area. Final screening and selection for the national awards are made by a committee composed of nationally prominent aviation people and FAA personnel. This national committee is established and administered by the Flight Safety Foundation.



**TOWER**

**OPERATIONS**

**MONTANA**

## TOWER CONTROLLED AIRPORT OPERATIONS

	June, 1965	Total Operations	Instrument Operations
Great Falls	10,064	719	
Billings	10,353	840	
Missoula	6,560	220	
Helena	3,974	110	

## LOVELACE WINS 99'S BIG SKY RACE

Mrs. Jack "Pud" Lovelace of Bozeman repeated her performance of the 1962 Big Sky Race and came in **Number 1** in the Ladies 99's race held on July 17. Pud with her co-pilot Mrs. Gilbert "Kay" Widmer of Bozeman, averaged 197.5—16.5 over her par speed in her Bonanza J35. Second place was won by Mrs. Milton "Vivian" Shrank, co-pilot Pearl Laska of Fairbanks, Alaska in a Piper PA12. Third place went to Mrs. Robert "Joy" Lueck, co-pilot Dorothy Dryden, both of Missoula, in a Piper Cherokee.



First Place Winners—co-pilot Kay Widmer and Pud Lovelace shown with the First Place trophy and their first Race Leg trophy. Pud highly congratulated President Elsie and Luella Nelson on their expert handling of the race planning.

Fourth and Fifth place winners were: Mrs. Brent "Pearl" Magill of Glasgow, co-pilot Bev Ledbetter of Havre in a Cessna 172. Pilot Mrs. Jack "Mary" Stevenson, Missoula, co-pilot daughter Gwen, in a Cessna 172.

### Leg Award Winners

1st Leg—Missoula to Kalispell—Pud Lovelace/Kay Widmer.

2nd Leg—Kalispell to Cut Bank—Mary Stevenson/Gwen.

3rd Leg—Cut Bank to Havre—Elsie Johnson, co-pilot Nora "Jimmie" Kuhn both of Missoula in a Cessna 182.

4th Leg—Havre to Great Falls—Vivian Shrank/Pearl Laska.

Remaining participants of the race were:

Sharel Hensley Bitz, co-pilot Collyn Hensley, both of Havre, in a Cessna 172.

Mrs. Edgar "Karin" Ribi of Hamilton, co-pilot Nancy Cook in a Cessna 175.

Mrs. Glenn "Elsie" Childs, co-pilot Mrs. Gene "Helen" Dunlop, both of Helena in a Stinson.

Mrs. John "Pat" Roemer, Missoula, flying alone in a Cessna 172.

Mrs. "Bobby" Kramer, Billings, flying alone in a Cessna 172.

Mrs. James "Dotty" Payne, Great Falls, co-pilot Miss "Sharon" Bowman of Belt, in a Cessna 172.

Mrs. Alfred "Margaret" Tuxill of Rexford, co-pilot Mrs. Jess "Lila" Bolen, Eureka in a Swift.

Mrs. "Patty" Ecton, Manhattan, flying alone in a Cessna 172.

Mrs. Ken "Luella" Nelson, co-pilot Mrs. Roger "Burdena" Price both of Great Falls, in a Ercoupe.

Mrs. Don "Rosemary" Bowman of Belt, co-pilot Mrs. Chet "Pepper" Severson, Great Falls, in a Cessna 182.



2nd Place Winners—Vivian Schrank and co-pilot Pearl Laska shown with their trophies. Pearl journeyed clear from Fairbanks, Alaska to participate in this years Big Sky Race.

Jack Wilson, Safety and Education Officer for the Montana Aeronautics Commission and Emil Olson, Chief of the Federal Aviation Agency Flight Service Station at Missoula and Mr. Robert J. Garnett, Great Falls accountant, were the official time computers and worked through the afternoon tabulating the flight times to determine the winners.

The trophies were awarded at the banquet held that evening at the Holiday Inn with Scott Stanley of Great Falls acting as Master of Ceremonies. Special mention was given Mr. Bud J. Majerus, Jr., Chief of the Great Falls Tower, for the tower control at International.

President of the MPA Hangar at

Missoula, Mr. Jack Stevenson and President of the Great Falls Hangar, Mr. Roger Price, each gave a short presentation and congratulated the flying 99's.



Third Place Winners—co-pilot Dorothy Dryden and Joy Lueck.



99's President Elsie Johnson receives her Race Leg winner trophy from Mr. Lynch, Director of the Montana Aeronautics Commission.

Mr. Charles Lynch, Montana Aeronautics Commission Director, made the trophy awards presented by the Commission to the first three place winners and the leg winners.

Mr. Lynch congratulating the winners, remarked that the banquet was certainly to honor all 29 participants and that he appreciated having been given the opportunity to present the trophies.

For being the pilot "having the poorest luck in the race", Margaret Tuxill was awarded a box of candy and sympathy. (Margaret had brake troubles on landing at International). Booby prize was awarded to Rose-

mary Bowman for having the longest time enroute. The pilot coming the greatest distance was Pearl Magill of Glasgow. Newest license holder was Mrs. Dorothy Dryden, co-pilot for Joy Lueck. Youngest co-pilot aboard was Mary Stevenson's daughter, Gwen. Mrs. Margaret Tuxill, who has been flying for the past 8 years, is a grandmother 18 times over and is the only Northwestern Montana member of the 99's. Sharel Hensley Bitz and co-pilot Collyn Hensley were the "sister team" in the race. Sharel and Collyn are the daughters of Mr. and Mrs. Walt Hensley, of Havre.



"Well, anyway, we sure had a lot of fun"—co-pilot Pepper Severson and pilot Rosemary Bowman.



Note comparing. (Lt. to Rt.) Mary Stevenson, Betty Nunn, Pat Ecton and Gwen Stevenson. Betty came over from North Wood, North Dakota to watch her fellow Montana 99's race. Betty was a Montana 99 for a number of years before moving to N. Dakota.

A number of clubs and private businesses presented cash and merchandise awards to the contestants.

Sixteen aircraft competed in the

race with mandatory landings made at each of the stops. Seven hours were allowed to complete the race against time.

A pre-flight dinner was held for the race participants at the Club Chateau on Friday evening in Missoula and the race kicked off at 6:30 a.m. on the morning of the 17th.

## A CASE IN POINT

by Charles A. Smith  
Commission Attorney

### "AIRPLANE CRASH—PASSENGER INJURED—NEGLIGENCE OF PILOT"

In this case, the plaintiff was injured in the crash of an airplane owned by a Southern Corporation and piloted by the corporate president. The plaintiff sought to recover damages for his personal injuries from the estate of the deceased pilot and the corporate owner of the aircraft. The jury returned a verdict for \$10,500 against both defendants. Thereafter, they both appealed from the ensuing judgment.

The evidence disclosed it was customary for pilots and others interested in aviation to gather at a local airport on Saturday afternoons to fly planes and to discuss aviation while drinking coffee in the coffee shop. On this particular afternoon the plaintiff, deceased pilot and two others, decided to make a flight over a nearby wild fowl reserve. The plane in question had been purchased by the corporate defendant less than a month before and had been flown only a few hours. It was a dual control plane, but the undisputed evidence was that the defendant was the only pilot and was in control of the plane.

After the plane was warmed up the pilot made some statement to the effect that he was going to make a short field take-off. A short field take-off is a maneuver used where there is limited space available. Its object is to get the plane off the ground quickly and climb enough to clear existing obstacles in a short running or flying distance. That manner of take-off is abnormal in the sense that, except for practice, it is used only where conditions make it necessary. The expert testimony was that a short field take-off is not dangerous if properly executed.

To a large extent an aircraft is caused to lift and stay in the air by

the airflow over the wing area. A short field take-off is accomplished by the adjustment of flaps located in each wing. These are regulated by a level which may be set in three different notches. The first notch will set the flaps at 20°, the second at 40°, and the third at 60°. In a normal take-off the flaps are in neutral. In a short field take-off it is recommended that the flaps be set in the first notch, but it is optional with the pilot as to whether he uses the first or second notch. The normal speed at which the plane in question will leave the ground is 70 to 80 miles per hour. However, when the flaps are lowered it slows the speed of the plane but it will lift from the ground quicker and at a slower speed. The danger in this procedure is that if the rate of climb is too steep the plane will stall, and unless corrective measures are taken instantly the plane will fall. A stall occurs when the aircraft over climbs to the point that it ceases to move forward, and, since there is no flow of air over the wings, the lift is eliminated and the plane ceases to fly. The instant plane was equipped with a stall warning signal which would make a noise similar to a fog horn when the plane was approaching a stall.

In executing the take-off in question the defendant set the flaps in the second notch. The plane left the ground while going from 40 to 50 miles per hour which is dangerously slow because at that speed it could stall at any time. Immediately after the craft "broke" ground the stall warning sounded and it continued to sound intermittently until actual stall occurred. When the plane reached an altitude variously estimated at from 75 to 150 feet it came to a "standstill"; began to "wobble" and went into a violent "shudder". At this point one wing dipped and the plane spiraled downward and crashed. The two passengers in the rear were not injured, but the defendant pilot was killed and the plaintiff injured.

The State Supreme Court found that there was no dispute in the evidence as to the cause of the crash and the action the pilot should have taken in order to avoid it. The crash was caused by the abnormally sharp rate of climb (contributed to by the weight of four heavy men) which reduced the speed of the craft to the

point where it was insufficient to complete the climb. As the plane approached a stall the proper procedure was to reduce the amount of flap used, thus lowering the nose of the plane and permitting it to gain speed before again continuing the climb. Instead of following that procedure the pilot, when the plane was dangerously near a stall, put the "flaps" lever in the third (60°) notch, thus raising the nose of the plane even more instead of lowering it. The effect of that action was to further decrease the speed, thus maintaining the stall which caused the plane to crash.

Thus, the State Supreme Court affirmed the trial court's finding that the deceased pilot was negligent.



## FEDERAL AVIATION AGENCY ITINERARY LISTING

Airport	August	Sept.
Bozeman (Gallatin Field)	12	
Culbertson	3	
Glasgow		15
Glendive	18	
Great Falls (International)	5	9
Lewistown	25	
Miles City (Municipal)		30
Missoula	19	23
Sidney		29

NOTE: Provisions have been made to give private pilot written examination **ON AN APPOINTMENT BASIS ONLY** at the following

FAA Flight Service Stations:

Bozeman	Lewistown
Butte	Livingston
Cut Bank	Miles City
Dillon	Missoula

## LOCAL SERVICE CARRIER 2 YEAR COMPARISON DATA

"Great Falls makes Greatest Percentage Increase on Frontier & Western Airlines"

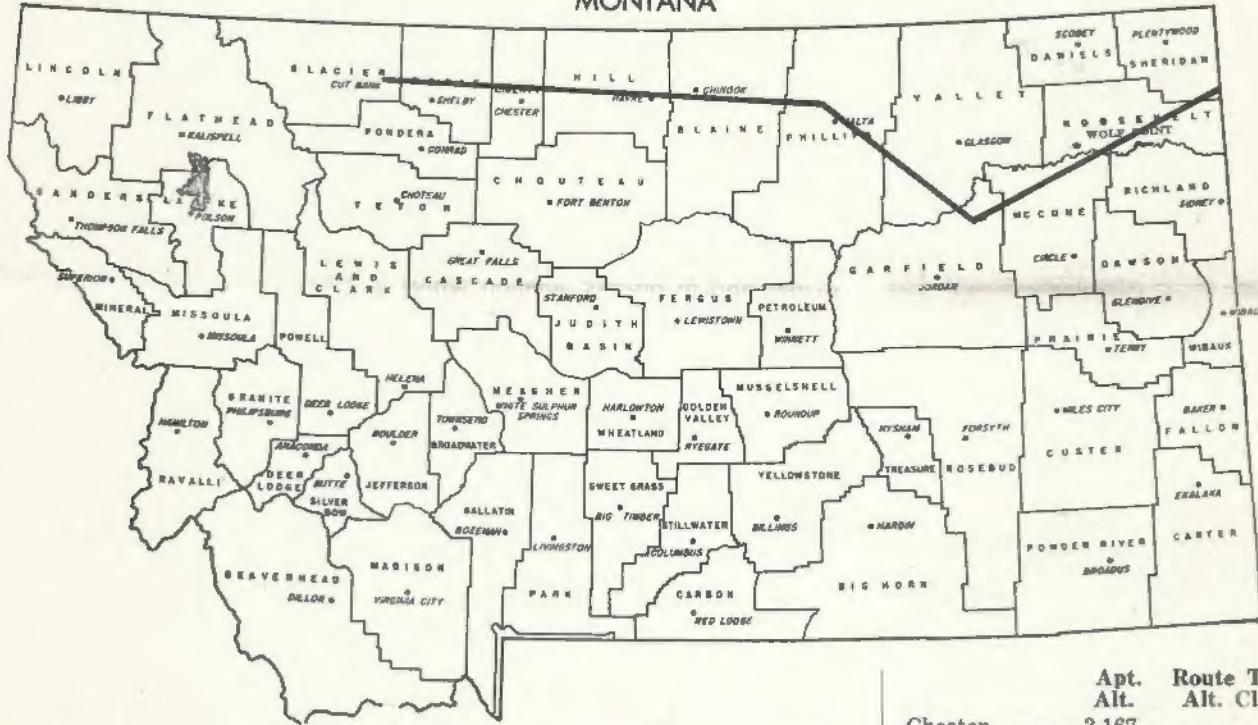
### Average Daily Passengers Originated FRONTIER AIRLINES, INC.

Authorized Point	12 Months Ended March 31 1964	12 Months Ended March 31 1965
Billings	39.31	43.75
Glasgow	4.88	5.19
Glendive	1.95	2.05
Great Falls	10.33	13.57
Havre	2.24	2.42
Lewistown	2.25	2.64
Miles City	3.16	3.28
Sidney	3.89	3.61
Wolf Point	2.06	2.02

### WEST COAST AIRLINES, INC.

Great Falls	3.67	5.69
Kalispell	5.78	7.10

## "FAST CHARGE RBS" MONTANA



The above depicted route is the route of the "Fast Charge" RBS Express Route which will be in effect from September 19, 1965 through November 13, 1965. The route shown is only the Montana route, however, the Fast Charge Express Route will cover portions of South Dakota, North Dakota and Montana.

It is readily evident that this route passes over, or in near proximity to, many of the airfields in the Northern portion of the State. Listed below are the airports, airport altitudes,

Fast Charge Route altitude and the height above ground level of the aircraft as they pass over or near the Montana airfields.

The rate of closure of the aircraft used on this exercise will be quite fast, so extreme caution should be exercised during the periods that these aircraft are on the Fast Charge Route.

(Notices to Airmen will contain further information as to the hours that this route will be in operation.)

	Apt. Alt.	Route Alt.	Terrain Clearance
Chester	3,167	on climb to 230	
Chinook	2,410	4,500	2,090
Culbertson	1,960	4,500	2,540
Cut Bank	3,854	23,000	19,146
Ft. Peck	2,294	4,500	2,106
Glasgow	2,298	4,500	2,102
Circle	2,424	4,500	2,076
Harlem	2,560	4,500	1,940
Havre	2,589	4,500	1,911
Hinsdale	2,180	4,500	2,320
Hogeland	3,150	4,500	1,350
Jordan	2,637	4,500	1,863
Malta	2,280	4,500	2,220
Medicine Lake	1,990	4,500	2,510
Nashua	2,070	4,500	2,430
Poplar	2,006	4,500	2,494
Richey	2,494	4,500	2,006
Shelby	3,425	on climb to 20,000	

## AIRPORT NOTES



by James H. Monger  
Assistant Director, Airports

**LINCOLN.** The new state airport one mile east of Lincoln is now under final construction and is presently being paved. This airport should be completed and open for traffic in early August. Pilots are advised not to use the new Lincoln airport while paving is underway.

**CULBERTSON.** Construction has started on the Culbertson Airport and pilots are advised to use extreme caution as men and equipment are on the field at all times. The east-west runway is being extended and paved. If weather permits this project should be completed late this fall.

**POPLAR.** Paving is now completed on the north-west/south-east runway at the Poplar Airport. Pilots are advised to use caution as men and equipment are still on the field.

**JORDAN.** Construction is now underway on the Jordan Airport. Use extreme caution and check NOTAM's as this field will be closed at certain times. The Jordan Airport reconstruction will consist of paving the north-west/south-east runway and taxiway and apron.

**MOORE.** The privately owned airport adjacent to the town of Moore is closed to the public.

**OVANDO.** The Clearwater Airport west of Ovando has been abandoned and is now closed, this airstrip has been sold by the Fish and Game Commission.

**WHITEFISH.** The airport at Whitefish has recently undergone extensive repair. Drainage ditches have been built on the outside edges of the runway and a portion of the runway has been built up and regraded. This work is now completed and the airport is again open to the public.

**STANFORD-HOBSON.** Preliminary



Whitefish Airport under repair.

meetings are being held with the Judith Basin County Commissioners for proposed airport work in that County. The County Commissioners are considering making application for a General Aviation Utility airport at Stanford and also a new G.A.U. airport at Hobson if suitable property is available. The new airport development at Stanford would be on the same location as the existing landing area.

**HYSHAM.** The Treasure County Commissioners have continued to assist the Aeronautics Commission airport division in finding a suitable location for a General Aviation Utility Air-Port near the town of Hysham. The availability of suitable property in this area is most difficult and the engineering department has just completed the 10th site investigation. It now appears that location No. 10 will be the site for the new airport. This area is located one and a half miles east of the town of Hysham adjacent to highway No. 10.

**SCHAFER CAMP GROUND.** The Montana Aeronautics Commission approved a project on the United States Forest Service airstrip at Schafer on the north edge of the Bob Marshall Wilderness area. This co-operative project will be between the MAC and the U.S. Forest Service and will consist of building a pilot's camp ground. The total project will cost approximately \$3,000. The campground will have picnic tables, fireplaces, tent areas, restrooms,

wood sheds, a council fire circle, picnic area and water. The camp-ground will be located in the old MPA campground site on the east end of the airport just south of the clear zone. Work is expected to be completed late this summer. Permanent tie-downs will be constructed for approximately ten aircraft adjacent to the campground site. In the event of larger fly-ins where there are more than ten aircraft they will be expected to park toward the west end of the runway and south of the runway near a new public camp-ground that was built by the Forest Service for packers and hunters. This campground location is also improved but will have a greater capacity than the MPA campground site and was primarily designed for hunting parties.

**NOTAM.** Pilots are urged to use extreme caution at Billings, Great Falls, and Missoula as these airports are under extensive construction projects.

**FOR SALE:** 172 Cessna 1958, 650 TTA. 560 Hrs. TTE., Narco VHT-3 radio and Omni. Full Panel. Will consider PA-11 or Super-Cub on trade. Contact Glenn L. Humphrey, Box 563, Big Sandy, Montana Phone: 378-2765.

**FOR SALE:** Cessna 150-1959-TT 300—All AD's—Excellent Condition—King KY 90—Super-Homer—Narco low freq. Price: \$4200.00. Contact: Mrs. L. Haasen, Box 1291, Havre, Mont.

**FOR SALE:** '59 Comanche 250-1317 TT—O—SMOH—Chromed Eng. Mark 2—ADF—Full Panel—External Power Plug Alcor—Exceptionally Clean. Price \$12,500. Contact: Morris Radio, 635 Lewis Ave., Billings, Mont. Phone: 259-1921 or 259-6339.

**FOR SALE:** Super Cub 125—Recovered 1963—300 SMOH—120 STOH—Scott Tall wheel—New Mark 2 Omnidicator—Price \$2950. Contact: R. Paulsen, Box 1376, Great Falls. Phone: 761-2300.

## NEW RULES REQUIRE RENEWAL OF FLIGHT INSTRUCTOR CERTIFICATES EVERY TWO YEARS

New regulations designed to improve general aviation safety by raising the standards of flight instruction and increasing instructor responsibility were announced today by the Federal Aviation Agency.

Effective September 26, 1965, the new rules put a two-year time limit on flight instructor certificates. Before renewal, flight instructors must demonstrate to FAA their proficiency and knowledge in both teaching techniques and piloting skills. However, little or no retesting would normally be required in the case of an instructor whose students' performance provides evidence of satisfactory training.

Ability to teach will be emphasized in the tests as much as ability to fly.

In addition to assuring instructor's qualification, the renewal requirement will provide FAA inspectors the opportunity of upgrading and standardizing instructional procedures. It also will give the instructor an opportunity to become familiar with new training requirements and procedures created by the introduction of new types of aircraft.

Under the new rules, flight instruction that is required for solo flight, or for a pilot certificate or rating, will not be acceptable unless given by a pilot holding a current FAA flight instructor certificate. Similarly, only persons holding a flight instructor certificate may endorse a pilot logbook to show they have given an applicant flight instruction.

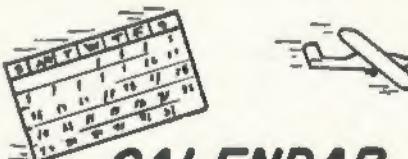
Provision also is made in the new rules for issuing flight instructor certificates to commercial glider pilots without an instructor rating, as well as authorizing them to give glider flight instruction for a period of 12 months after the new rules take effect.

Student pilots will be required to obtain periodic flight checks from a certificated instructor and must have an instructor's authorization before each solo cross-country flight. These requirements will apply until the student has reached a level of experience equivalent to that required for a private pilot certificate and has been certified by a flight instructor

as competent to continue without an instructor's supervision.

An applicant for a flight test that is required for a pilot certificate, or aircraft or instrument rating would first need a certificated flight instructor's written statement that the instructor has prepared the applicant for the test and considers him ready to take it. In case of failure and retesting, the statement would again be required.

Only in the case of applying for a type rating do these requirements not apply.



## CALENDAR

**August 5, Helena**—Local MPA Hangar will hold a picnic supper at the Country Club. Cocktail party at 6:30 p.m. Supper at 7:30 p.m. Dancing inside after dark. \$2.50 per Person. (All Helena Hangar members should plan to attend and bring a new pilot if possible.)

**August 7 & 8, Livingston**—Fly-In and Beef Barbecue. National Fish Derby to be held August 8. Fly-In and enjoy the barbecue and derby.

**August 8-13, Omaha, Nebraska**—International Flying Farmer's Convention.

**August 11, Helena**—Montana Aeronautics Commission regular meeting.

**August 15, Minot, North Dakota**—Minot Air Force Base. Breakfast "Fly-In" for civilian pilots and owners from 8 A.M. to 4:30 P.M. All civilian pilots and guests are cordially invited to attend (see article).

**August 16, Denver, Colorado**—Pacific Northwest/Southwest Service Case—Civil Aeronautics Board hearing.

**August 28 & 29, Lander, Wyoming**—International FF Amigo Days. Beef Barbecue, Junior Rodeo, Helicopter rides, Little Theatre Melodrama, Rifle matches and many more events. Meet dignitaries from Mexico and Washington D.C. (Free transportation to and from the Lander airport to the Ranch).

**September 12, Harlowton**—2nd Annual Fly-In. Free Breakfast 7 A.M. The event is sponsored by the Chamber of Commerce with the assistance of the Kiwanis Club, Country Club

and the Flying Club. Transportation will be provided free by Harlo Motors, Ford-Mercury—Fly In and Play Golf.

**September 23, 24 & 25, Portland, Oregon**—International Northwest Aviation Council Annual Fall Meeting.

**Sept. 28 - October 3, Las Vegas, Nevada**—AOPA Plantation Party and Industry Exhibit. Industry exhibits and aviation clinic sessions open to all. For entertainment accommodations "package plan" rates, information on flight training course and registration, write Plantation Party, AOPA, Washington D. C. 20014.

**October 2, Grand Haven, Michigan**—The 10th Annual Michigan Small Race conducted in cooperation with the Michigan State Dept. of Aeronautics and sponsored by the Michigan chapter of Ninety-Nines, International Organization of Licensed Women Pilots, will be held at Grand Haven Memorial Park.

**October 11-13, Norman, Oklahoma**—The National Airports Conference to be held at University of Oklahoma. The conference is held under the joint sponsorship of the University of Oklahoma and the American Association of Airport Executives with the active support of the FAA. Persons, in all segments of the Aviation Industry, should endeavor to participate in this national conference.

## DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS

Part 71 of the Federal Aviation Regulations is amended effective 0001 EST, September 16, 1965, as hereinafter set forth.

(1) In Section 71.165 (29 F.R. 17557) the Billings, Montana, control area extension is revoked in its entirety.

(2) In Section 71.171 (29 F.R. 17581) the Billings, Mont., control zone is amended to read:

Billings, Montana

Within a 5-mile radius of Logan Field, Billings, Mont. (Lat. 45° 48' 23" N., Long. 108° 31' 54" W.); and within 2 miles each side of the Billings ILS localizer W course extending from the 5-miles radius zone to 8 miles W of the OM and within 2 miles each side of the Billings VORTAC 095° and 267° radials extend-

ing from 12 miles E to 8 miles W of the VORTAC.

(3) In Section 71.181 (29 F.R. 17643) the following transition area is added:

#### Billings, Montana

That airspace extending upward from 700 feet above the surface within an 8-mile radius of Logan Field, Billings, Montana (Lat. 45° 48' 23" N., Long. 108° 31' 54" W.); and within 2 miles each side of the 071° bearing from the Billings RBN extending from the 8-mile radius area to 8 miles E of the RBN; and within 5 miles N and 8 miles S of the Billings VORTAC 267° radial extending from the 8-mile radius area to 12 miles W of the VORTAC; and within 5 miles N and 8 miles S of the Billings ILS localizer W course extending from the 8-mile radius area to 12 miles W of the OM; and that airspace extending upward from 1200 feet above the surface within a 21-mile radius of the Billings VORTAC extending clockwise from V-2 W of Billings to V-19 SE of Billings; and within 10 miles SW and 7 miles NE of the Billings VORTAC 301° radial extending from 20 miles NW of the VORTAC to 49 miles NW of the VORTAC; and within 10 miles SW and 7 miles NE of the Billings VORTAC 317° radial extending from the 21-mile radius area to 45 miles NW of the VORTAC; and within 10 miles W and 7 miles E of the Billings VORTAC 347° radial extending from the 21-mile radius area to 42 miles N of the VORTAC.

These amendments are made under the authority of Section 307 (a) of the Federal Aviation Act of 1958 (49 U.S.C. 1348).

---

### FROM YOUR WEATHER BUREAU

by R. A. Dightman,  
Meteorologist in Charge  
Helena, Montana

Much has been said and written over the years about aviation weather broadcasts, and more recently, about the so-called "one-stop/one-call" pilot briefing service. Occasionally we visit with a pilot who isn't as familiar with these services as he should be, and once-in awhile there is one who appears to have not heard of either.

During the last few months the Weather Bureau has prepared up-to-date summaries describing both facets of aviation weather service.

Following are both summaries which have been prepared with the needs and weather service uses of the smaller plane pilots in mind.

#### ONE-STOP/ONE-CALL PILOT BRIEFING SERVICE

The title, "One-Stop/One-Call Pilot Briefing Service", quite aptly describes the service which the Weather Bureau and Federal Aviation Agency (FAA) are cooperating to establish where they both have facilities serving the same community. The service is designed to make it possible for a pilot to obtain a complete preflight briefing—weather, NOTAMS, flight plan—through a single telephone call or visit to an FAA Flight Service Station (FSS).

FAA Flight Service Specialists are Weather Bureau trained to do pilot weather briefing. They handle the job along with their other preflight briefing responsibilities. When more technical meteorological advice is required than the FAA specialist can provide or when the pilot desires to talk with the forecaster personally, the caller is placed in direct contact with the Weather Bureau.

Referring the pilot to the Weather Bureau forecaster is no problem in a person-to-person briefing where the two offices are located physically adjacent and a common briefing display is used. In the case of telephone-type service, a switching device is employed which allows the Flight Service Specialist to transfer calls to the Weather Bureau office. Only calls for aviation weather will be "switched-through". Persons calling for general weather service will be referred to the Weather Bureau's listed public telephone number.

At airports where "one-call" service is available, calls by pilots for aviation weather information are placed through the Flight Service Station using the telephone number of the FSS. One can readily determine where "one-call" FSS/WBAS service is available by referring to the telephone listing in Section IV A of the AIRMAN'S INFORMATION MANUAL. City telephone directories, as they are revised, will refer pilots to the "one-call" number by a note under Weather Bureau, "one-call" FSS/WBAS, see FSS". The number will be given under the Federal Aviation Agency listing. At places having a Weather Bureau station but no FSS, the Weather Bureau should, of course, be contacted direct for pilot

weather briefings. Also, at places having both Weather Bureau and FSS with "one-call" service, pilots may continue calling the Weather Bureau directly for weather briefings whenever they wish.

By taking advantage of the "one-call" service, pilots do not compete with the general public, newspaper reporters, radio announcers etc., for weather information as they do when telephoning directly to the Weather Bureau. The common briefing display which is characteristic of the "one-stop" service provides the FSS with facsimile weather maps, Service C Copy, and other weather materials not heretofore available in these FAA facilities. Both services make it possible to obtain navigational information, NOTAMS, weather, and to file flight plans, with a single operation—either "one-stop" or "one-call".

#### AVIATION WEATHER BROADCASTS

Weather Bureau reports, forecasts, and advisories are broadcast over radio communication facilities of the Federal Aviation Agency (FAA). Although the weather in these releases is prepared and selected with the pilot in mind, the broadcasts are also popular with amateur weathermen and others of the general public who are engaged in the planning of outdoor activities.

Aviation weather broadcasts are perhaps best described under the categories of "scheduled broadcasts" and "continuous broadcasts." They also differ in that some are transmitted over low/medium frequencies (L/MF) ranging from 200 to 400 kilocycles (kc.) and others are broadcast on the very high frequencies (VHF) of 108 to 118 megacycles (mc.). (Both ranges cover frequencies the average home radio will not receive.)

Scheduled aviation broadcasts are made twice each hour. At 15 minutes past the hour, current weather reports for 8 to 12 locations within 150 miles of the broadcast outlet are transmitted. At 45 minutes past the hour, a similar number of reports are broadcast for the more important cities and airports within a 400 mile radius. As appropriate, scheduled broadcasts include advance warnings of potentially hazardous weather, such as squall lines, thunderstorms, fog, icing, and turbulence. Weather radar reports are given, if available. Some scheduled

aviation weather broadcasts are transmitted on the VHF channels and others on the L/MF channels.

**Continuous** transcribed weather broadcasts include for a radius of 250 miles of the broadcast outlet: a description of the synoptic situation, a forecast of aviation weather including upper level winds, warning, (if in effect), pilot and radar reports (if available), and current weather reports (8 to 15). These items are repeated making the service continuous. Material is updated as new reports and revised forecasts are issued. Continuous broadcasts are contained within the 200 to 400 kilocycle range.

At ground level, VHF broadcasts are picked up only short distances from the transmitting sight. Only one VHF aviation broadcast is, therefore, likely to be received in any given area. Whether one is available can be determined by scanning the 108 to 118 megacycle band at 15 or 45 minutes past the hour.

During the evening or early morning hours and with a sensitive receiver and good antenna exposure, the L/MF broadcasts can be received up to 100 or more miles. With average equipment, the maximum range is reduced to about 50 miles. Frequencies and outlet locations of L/MF broadcasts providing scheduled and continuous aviation weather information are listed.

#### CONTINUOUS AND SCHEDULED AVIATION WEATHER BROADCASTS ON (200-400 KILOCYCLE) RADIO FACILITIES

(S) Scheduled (C) Continuous

#### MONTANA

Billings	400(C)
Bozeman	329(C)
Cut Bank	263(S)
Dillon	379(S)
Great Falls	371(C)
Helena	317(S)
Lewistown	353(S)
Livingston	224(S)
Miles City	320(C)
Missoula	308(C)
Whitehall	284(S)

FOR SALE: 1953 Tri-Pacer—1200 hours total time—700 SMOH—Annuated in June, full panel, superhome VHF LF with ADF. Contact Harry A. Patrick, Rudyard, Montana. Phone: 375-2272.

FOR SALE: PA-18—1951—125 HP. Sorenson 90 Gal. spray rig. Full electric system—162 STOH—630 SMOH. Price: \$2350. Contact: Roger Lincoln, Rudyard, Montana.

FOR SALE: Piper Tri Pacer PA-22—199 SMOH—TT 2440—New License—Excellent Condition. Price: \$3000. Contact: M. P. Branning, Helena, Phone: 442-1222.

## IRV RIEKE PURCHASES GILLIS AVIATION



Gillis Aviation's recently completed new quarters.

Piper Aircraft Corporation, Lock Haven, Pennsylvania, announced July 1st, I. H. "Irv" Rieke formerly part owner of Gillis Aviation, Billings, Montana, has now purchased the entire Gillis Aviation Stock.

Mr. Rieke plans to split the company into two separate entities. A new company named "Montana Piper Distributor" will handle parts and aircraft sales to the dealer or-

ganization and Gillis Aviation will be a Piper Dealer and run a fixed based operation. John Gallagher, former District Sales Manager for Piper Aircraft in the Northwest Region has been appointed General Manager by Mr. Rieke for both companies.

Al Gillis, formerly part owner and manager of Gillis Aviation has not announced his plans for the future.

## CONGRATULATIONS



## CERTIFICATES ISSUED RECENTLY TO MONTANA FLYERS

Henderson, Richard A., Hall, Mont.
Student
Leslie, Hugh A., Ennis, Mont.
Student
Bernet, James L., Helena—Private
Campbell, Claude M. Jr., Livingston
—Student
Mulcare, Ellen L., Lincoln—Student
Beer, John C., Great Falls—Student
Short, Billy Ray, Louisa, Kentucky—
Student
Mandeville, Stephen G., Bozeman—
Student
Alderson, Ivan E., Sunny Valley, Ore.
—Flight Instr. Airplane
Woods, Gary, Helena—Student
Turner, Wayne Carl, Great Falls—
Com.
Kilpatrick, Harold J., Kalispell—
Student

Jellison, Marshall Dean, Kalispell—  
Student

Carpenter, Kenneth C., Helena—  
Com. ASEL&S

Sand, Harold E., Kalispell—Student

Olsen, Lyle A., Bozeman—Student

Sherick, Paul M., Polson—Private

Grosse, Otto Henry, Great Falls—  
Student

Rauscher, Henry E., Great Falls—  
Student

Garner, Richard F., Great Falls—  
Private

Himsl, Allen W., Kalispell—Student

Thompson, James Robert II, Miles  
City—Private

Barr, Richard W., Missoula—Private

Dilley, Raymond George, St. Johnsbury, Vt.—Private

Miller, Robert Edwin, Missoula—  
Private

Koch, Gerald, Missoula—Private

Tomlinson, Donald F., Missoula—  
Student

Tennant, Edw. Lewis, Hamilton—  
Student

Brogger, James N., Missoula—  
Student

Moore, Donald Alva, Missoula—  
Student

Ward, Vernon R., Columbia Falls—  
Student

## FF'S ENJOY FOURTH OF JULY FLY-IN

Montana Flying Farmers and Ranchers enjoyed a holiday at Martha and Ed Baldwin's home on Flathead Lake the 4th of July. Approximately 25 members flew in for the annual potluck event. Afternoon activities included boating and water skiing.

Cliff Cunningham, Cessna distributor for this area, presented Eleanor Greening, Montana's Flying Farmer Queen, with a trophy which is sponsored by the Montana Cessna dealers, and Queen Eleanor was presented her crown by past queen Verna Woods."

A fine time was had by all!!

**FOR SALE:** 1 Air Cooler for Cessna 180. Complete set of 6:00 x 6 wheels. Brakes, assembled discs and blocks—Goodyear. 2 5:00 x 5 Main wheels, 10-ply tires and tubes. 1 set silver aluminum wheel pants for Cessna Aircraft. 1 1" Inlet - 3/4" outlet Simplex pump. Contact: Shorty Stott, 1215 Tenth Ave. S. W., Great Falls, Phone: 453-8343.



A portion of the group with Queen Eleanor standing in the center with her Cessna trophy presented by Cliff Cunningham, shown kneeling to the right.

### MEMBER

### NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

**PURPOSE:**—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

P. O. Box 1698  
Helena, Montana  
Return Postage Guaranteed



AUGUST, 1965

U. S. POSTAGE  
PAID  
HELENA, MONTANA  
Permit No. 2